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10/539,300

03/21/2006

Kiichiro Kato

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POSZ LAW GROUP, PLC  
12040 SOUTH LAKES DRIVE  
SUITE 101  
RESTON, VA 20191

EXAMINER

WATKINS III, WILLIAM P

ART UNIT

PAPER NUMBER

1783

MAIL DATE

DELIVERY MODE

08/03/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



### DETAILED ACTION

1. Applicant's claim amendments and arguments filed 21 April 2010 have been considered. A modified ground of rejection is given below in view of applicant's arguments and claim amendments.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inako et al. (JP-A 02-107682, see PTO Translation 09-1691) in view of Liu et al. (U.S. 6,627,844) further in view of Aoyama (JP 01125345 U, see PTO Translation 09-4484) still further in view of Nakatani et al. (U.S. 5,811,754).

Inako et al. teaches a pressure sensitive adhesive sheet with applicant's claimed hole range. See the JPO abstract which shows a hole density of .2 to 1 mm and a hole separation of 1 to 10 mm for a pressure sensitive adhesive sheet. This meets applicant's limitation of .1 to 300 microns and 30 to 50,000 per 100 cm. Inako et al. teaches the use of PVC, polyester, polyurethane, and polyolefin substrates (middle of page 8 of the translation). Inako et al. fails to teach an entrance hole in the back of the substrate larger than the exit hole in the top of the substrate. Liu et al. teaches laser

machining of holes to produce entrance holes that are larger than exit holes (abstract, Figure 2). Inako et al. in view of Liu et al. fail to teach a hole diameter 40 microns or less. Aoyama teaches a hole size of 5 to 500 microns to provide ventilation in an adhesive tape (page 3 of the translation). Inako et al. in view of Liu et al. et al. further in view of Aoyama fail to teach the specific suitability of polyester, polyurethane, PVC, and polyolefin substrates for laser perforation. Nakatani et al. teaches the specific suitability of polyester, polyurethane, PVC, and polyolefin for laser perforation if the proper energy levels and wavelengths are used (Figure 6, Figure 12, col. 16, lines 50-55, col. 27, lines 15-30).

The instant invention claims exit holes on the outside of the adhesive sheet that are smaller than the holes on the adhesive side and a front sheet diameter of less than 40 microns. It would have been obvious to one of ordinary skill in the art to have used the laser method of Liu et al. to perforate the sheet of Inako et al. and from the larger holes on the adhesive side to preserve the appearance of the outside of the tape because of the teachings of Liu et al. It further would have been obvious to have used a outside sheet hole diameter 30 microns or smaller in the adhesive sheet of Inako et al. in view of Liu et al. in order to have a less visible hole because of the teachings of Aoyama. It still further would have been obvious to have laser perforated the PVC, polyolefin, polyester, and polyurethane substrates of Inako et al. as modified above in view of the expectation of success established by Nakatani et al.

4. Applicant's arguments with respect to claims 1, 10 and 12-14 have been considered but have not been found persuasive.

Applicant argues that the claimed polymer substrates either have melting points too low to allow the use of laser perforation or produce corrosive gases. The modified rejection above teaches the expectation of success when using these substrates if the proper energy levels and wavelengths of light are used. Control of off gases by proper ventilation is within the ordinary skill of the art.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 571-272-1503. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WW/ww  
August 2, 2010

/William P. Watkins III/

Primary Examiner, Art Unit 1794

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